

CLAIMS

What is claimed is:

Claim 1. A method of treating a human tumor in a mammal, wherein said tumor expresses an antigen which specifically binds to a monoclonal antibody or antigen binding fragment thereof which has the identifying characteristics of a monoclonal antibody encoded by a clone deposited with the ATCC as accession number PTA-4890, comprising administering to said mammal said monoclonal antibody in an amount effective to reduce said mammal's tumor burden.

Claim 2. The method of claim 1 wherein said antibody is conjugated to a cytotoxic moiety.

Claim 3. The method of claim 2 wherein said cytotoxic moiety is a radioactive isotope.

Claim 4. The method of claim 1 wherein said antibody activates complement.

Claim 5. The method of claim 1 wherein said antibody mediates antibody dependent cellular cytotoxicity.

Claim 6. The method of claim 1 wherein said antibody is a murine antibody.

1 Claim 7. The method of claim 1 wherein said antibody is a humanized antibody

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3 Claim 8. The method of claim 1 wherein said antibody is a chimerized antibody.

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5 Claim 9. An isolated monoclonal antibody or antigen binding fragments
6 thereof encoded by the clone deposited with the ATCC as accession number PTA-4890.

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8 Claim 10. The isolated antibody or antigen binding fragments of claim 9,
9 wherein said isolated antibody or antigen binding fragments thereof is humanized.

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11 Claim 11. The isolated antibody or antigen binding fragments of claim 9
12 conjugated with a member selected from the group consisting of cytotoxic moieties,
13 enzymes, radioactive compounds, and hematogenous cells.

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15 Claim 12. The isolated antibody or antigen binding fragments of claim 9,
16 wherein said isolated antibody or antigen binding fragments thereof is a chimerized
17 antibody.

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19 Claim 13. The isolated antibody or antigen binding fragments of claim 9,
20 wherein said isolated antibody or antigen binding fragments thereof is a murine antibody.

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1 Claim 14. The isolated clone deposited with the ATCC as accession number
2 PTA-4890.

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4 Claim 15. A binding assay to determine presence of cancerous cells in a tissue
5 sample selected from a human tumor comprising:

6 providing a tissue sample from said human tumor ;

7 providing an isolated monoclonal antibody or antigen binding fragment thereof
8 encoded by the clone deposited with the ATCC as accession number PTA-4890;

9 contacting said isolated monoclonal antibody or antigen binding fragment thereof
10 with said tissue sample; and

11 determining binding of said isolated monoclonal antibody or antigen binding
12 fragment thereof with said tissue sample;

13 whereby the presence of said cancerous cells in said tissue sample is indicated.

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15 Claim 16. The binding assay of claim 15 wherein the human tumor tissue
16 sample is obtained from a tumor originating in a tissue selected from the group consisting
17 of colon, ovarian, lung, and breast tissue.

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19 Claim 17. A process of isolating or screening for cancerous cells in a tissue
20 sample selected from a human tumor comprising:

1 providing a tissue sample from a said human tumor ;
2 providing an isolated monoclonal antibody or antigen binding fragment thereof
3 encoded by the clone deposited with the ATCC as accession number PTA-4890;
4 contacting said isolated monoclonal antibody or antigen binding fragment thereof
5 with said tissue sample; and
6 determining binding of said isolated monoclonal antibody or antigen binding
7 fragment thereof with said tissue sample;
8 whereby said cancerous cells are isolated by said binding and their presence in said
9 tissue sample is confirmed.

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11 Claim 18. The process of claim 17 wherein the human tumor tissue sample is
12 obtained from a tumor originating in a tissue selected from the group consisting of colon,
13 ovarian, lung, and breast tissue.

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15 Claim 19. A method of treating a human tumor in a mammal, wherein said tumor
16 expresses an antigen which specifically binds to a monoclonal antibody or antigen binding
17 fragment thereof which has the identifying characteristics of a monoclonal antibody
18 encoded by a clone deposited with the ATCC as accession number PTA-4889, comprising
19 administering to said mammal said monoclonal antibody in an amount effective to reduce

1 said mammal's tumor burden.

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4 Claim 20. The method of claim 19 wherein said antibody is conjugated to a
5 cytotoxic moiety.

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7 Claim 21. The method of claim 20 wherein said cytotoxic moiety is a radioactive
8 isotope.

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10 Claim 22. The method of claim 19 wherein said antibody activates complement.

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12 Claim 23. The method of claim 19 wherein said antibody mediates antibody
13 dependent cellular cytotoxicity.

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15 Claim 24. The method of claim 19 wherein said antibody is a murine antibody.

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17 Claim 25. The method of claim 19 wherein said antibody is a humanized antibody

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19 Claim 26. The method of claim 19 wherein said antibody is a chimerized antibody.

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21 Claim 27. An isolated monoclonal antibody or antigen binding fragments
22 thereof encoded by the clone deposited with the ATCC as accession number PTA-4889.

1 Claim 28. The isolated antibody or antigen binding fragments of claim 27,
2 wherein said isolated antibody or antigen binding fragments thereof is humanized.

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4 Claim 29. The isolated antibody or antigen binding fragments of claim 27
5 conjugated with a member selected from the group consisting of cytotoxic moieties,
6 enzymes, radioactive compounds, and hematogenous cells.

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8 Claim 30. The isolated antibody or antigen binding fragments of claim 27,
9 wherein said isolated antibody or antigen binding fragments thereof is a chimerized
10 antibody.

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12 Claim 31. The isolated antibody or antigen binding fragments of claim 27,
13 wherein said isolated antibody or antigen binding fragments thereof is a murine antibody.

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15 Claim 32. The isolated clone deposited with the ATCC as accession number
16 PTA-4889.

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18 Claim 33. A binding assay to determine presence of cancerous cells in a tissue
19 sample selected from a human tumor comprising:

20 providing a tissue sample from said human tumor ;

1 providing an isolated monoclonal antibody or antigen binding fragment thereof
2 encoded by the clone deposited with the ATCC as accession number PTA-4889;
3 contacting said isolated monoclonal antibody or antigen binding fragment thereof
4 with said tissue sample; and
5 determining binding of said isolated monoclonal antibody or antigen binding
6 fragment thereof with said tissue sample;
7 whereby the presence of said cancerous cells in said tissue sample is indicated.

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9 Claim 34. The binding assay of claim 33 wherein the human tumor tissue
10 sample is obtained from a tumor originating in a tissue selected from the group consisting
11 of colon, ovarian, lung, and breast tissue.

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13 Claim 35. A process of isolating or screening for cancerous cells in a tissue
14 sample selected from a human tumor comprising:

15 providing a tissue sample from a said human tumor ;

16 providing an isolated monoclonal antibody or antigen binding fragment thereof
17 encoded by the clone deposited with the ATCC as accession number PTA-4889:

18 contacting said isolated monoclonal antibody or antigen binding fragment thereof
19 with said tissue sample; and

1 determining binding of said isolated monoclonal antibody or antigen binding
2 fragment thereof with said tissue sample;
3 whereby said cancerous cells are isolated by said binding and their presence in said
4 tissue sample is confirmed.

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6 Claim 36. The process of claim 35 wherein the human tumor tissue sample is
7 obtained from a tumor originating in a tissue selected from the group consisting of colon,
8 ovarian, lung, and breast tissue.

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10 Claim 37. A method of treating a human tumor in a mammal, wherein said tumor
11 expresses an antigen which specifically binds to a monoclonal antibody or antigen binding
12 fragment thereof which has the identifying characteristics of a monoclonal antibody
13 encoded by a clone deposited with the ATCC as accession number PTA-5643, comprising
14 administering to said mammal said monoclonal antibody in an amount effective to reduce
15 said mammal's tumor burden.

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17 Claim 38. The method of claim 37 wherein said antibody is conjugated to a
18 cytotoxic moiety.

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20 Claim 39. The method of claim 38 wherein said cytotoxic moiety is a radioactive
21 isotope.

1 Claim 40. The method of claim 37 wherein said antibody activates complement.

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3 Claim 41. The method of claim 37 wherein said antibody mediates antibody
4 dependent cellular cytotoxicity.

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6 Claim 42. The method of claim 37 wherein said antibody is a murine antibody.

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8 Claim 43. The method of claim 37 wherein said antibody is a humanized antibody

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10 Claim 44. The method of claim 37 wherein said antibody is a chimerized antibody.

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12 Claim 45. An isolated monoclonal antibody or antigen binding fragments
13 thereof encoded by the clone deposited with the ATCC as accession number PTA-5643.

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15 Claim 46. The isolated antibody or antigen binding fragments of claim 45,
16 wherein said isolated antibody or antigen binding fragments thereof is humanized.

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18 Claim 47. The isolated antibody or antigen binding fragments of claim 45
19 conjugated with a member selected from the group consisting of cytotoxic moieties,
20 enzymes, radioactive compounds, and hematogenous cells.

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1 Claim 48. The isolated antibody or antigen binding fragments of claim 45,
2 wherein said isolated antibody or antigen binding fragments thereof is a chimerized
3 antibody.

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5 Claim 49. The isolated antibody or antigen binding fragments of claim 45,
6 wherein said isolated antibody or antigen binding fragments thereof is a murine antibody.

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8 Claim 50. The isolated clone deposited with the ATCC as accession number
9 PTA-5643.

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11 Claim 51. A binding assay to determine presence of cancerous cells in a tissue
12 sample selected from a human tumor comprising:

13 providing a tissue sample from said human tumor ;

14 providing an isolated monoclonal antibody or antigen binding fragment thereof
15 encoded by the clone deposited with the ATCC as accession number PTA-5643;

16 contacting said isolated monoclonal antibody or antigen binding fragment thereof
17 with said tissue sample; and

18 determining binding of said isolated monoclonal antibody or antigen binding
19 fragment thereof with said tissue sample;

20 whereby the presence of said cancerous cells in said tissue sample is indicated.

1 Claim 52. The binding assay of claim 51 wherein the human tumor tissue
2 sample is obtained from a tumor originating in a tissue selected from the group consisting
3 of colon, ovarian, lung, and breast tissue.

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5 Claim 53. A process of isolating or screening for cancerous cells in a tissue
6 sample selected from a human tumor comprising:

7 providing a tissue sample from a said human tumor ;

8 providing an isolated monoclonal antibody or antigen binding fragment thereof
9 encoded by the clone deposited with the ATCC as accession number PTA-5643:

10 contacting said isolated monoclonal antibody or antigen binding fragment thereof
11 with said tissue sample; and

12 determining binding of said isolated monoclonal antibody or antigen binding
13 fragment thereof with said tissue sample;

14 whereby said cancerous cells are isolated by said binding and their presence in said
15 tissue sample is confirmed.

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17 Claim 54. The process of claim 53 wherein the human tumor tissue sample is
18 obtained from a tumor originating in a tissue selected from the group consisting of colon,
19 ovarian, lung, and breast tissue

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